



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/722,252 | 11/22/2003 | Tomas Nestor Hasing | | 6070 |

7590

05/03/2006

Tomas N. Hasing
Buenos Aires 1310
Barrio Bellavista
Riobamba,
ECUADOR

EXAMINER

DANIELS, MATTHEW J

ART UNIT

PAPER NUMBER

1732

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | | |
|------------------------------|------------------------|--|---------------------|--|
| Office Action Summary | Application No. | | Applicant(s) | |
| | 10/722,252 | | HASING ET AL. | |
| | Examiner | | Art Unit | |
| | Matthew J. Daniels | | 1732 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 1-13 and 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group II, Claims 14-21 in the reply filed on 5 April 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Claims 1-13 and 22 are withdrawn as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claims 14, 16, and 20** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. **As to Claim 14**, the phrase "including, but not limited to:" makes it unclear and indefinite what other items are considered to be within the scope of the claim. **As to Claims 16 and 20**, part (a) of each of these claims states "which can be any structure, substance, or force field suitable to transfer or generate rotational force;" Apparatus claims are drawn to particular structures, and the particular structures have not been set forth as claim limitations. Apparatus claims cover what a device *is*, not what the device *does*.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 18-20** are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cheney (USPN 3170011). **As to Claim 18**, Cheney teaches an improvement to a blown-film extruder to allow the application of at least one substance to the inner surface of a bubble during blown-film extrusion, comprising at least one apparatus affixed to the extruder at a location suitable for placing material on the inner surface of the bubble during blown-film extrusion (Figs. 1-6). While Cheney is silent to “atomizing”, the Examiner submits that an apparatus claim covers what an apparatus is, not what an apparatus does. Because the apparatus of Cheney would have inherently or obviously been capable of rotating, it would have therefore inherently or obviously possessed the capability to atomize. The burden is on the Applicant to show otherwise. **As to Claim 19**, Cheney’s apparatus is affixed to the die mandrel of the blown-film extruder (Fig. 2, Items 22 and 14). **As to Claim 20**, Cheney teaches an improvement to a blown-film extruder wherein at least one atomizing apparatus is a rotary atomization device (Figs. 3-6) comprising:

a) a rotating component of any structure, substance or force, suitable to transfer or generate rotational force (arrow in Fig. 3);

b) a cylindrical part mounted for rotation, with a rotational axis perpendicular to the surfaces of the cylindrical part that have a circular perimeter, the cylindrical part being rotated by the rotating component (arrow in Fig. 3);

c) a conduit, which guides the fluid surfaces to one of surfaces of the cylindrical part that have a circular perimeter, the conduit comprising

c1) tubing (Fig. 5, Item 20);

c2) at least one channel in the die mandrel of the blown-film extruder (Fig. 5, Item 20);

c3) at least one channel in the rotating component (Fig. 3, Item 26);

c4) at least one channel in the cylindrical part (Fig. 3, Item 23).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. **Claims 14-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Cheney (USPN 3170011). **As to Claim 14**, Applicant's claim admits that parts (a1) to (a5) are "typical of a blown film extruder" (Claim 14, line 2). Because these aspects are admitted to be typical, they would have been obvious in the art.

Additionally, Cheney teaches part (b), at least one atomizing apparatus affixed to the blown-film extruder at a location suitable for placing atomized material on the inner surface of a bubble, during blown-film extrusion (Fig. 2).

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the apparatus of Cheney into the Applicant's admitted prior art in order to provide close and accurate temperature control and efficient and efficacious cooling of the freshly extruded film product (Cheney, 2:17-23). **As to Claim 15**, Cheney additionally teaches at least one atomizing apparatus is affixed die mandrel of the blown-film extruder (Figs. 1-2, Items 13, 14, 23). **As to Claim 16**, Cheney's device is a rotary atomization device comprising:

- a) a rotating component, which is suitable to transfer or generate rotational force (Fig. 3);
- b) cylindrical part mounted rotation, with a rotational axis perpendicular to the surfaces of the cylindrical part that have a circular perimeter, the cylindrical part being rotated by the rotating component (Fig. 3);
- c) a conduit, which guides the fluid to one of the surfaces of the cylindrical part that have a circular perimeter, the conduit comprising at least one of the following:
 - c1) tubing (Fig. 2, Item 26);
 - c2) at least one channel in the die mandrel of the blown-film extruder (Fig. 2, Item 14);

- c3) at least one channel in the rotating component (Fig. 4, Item 20);
- c4) at least one channel in the cylindrical part (Fig. 4, Item 20);

5. **Claim 17** is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Cheney (USPN 3170011) and Waldrum (USPN 2917241).

Applicant's admitted prior art and Cheney teach the subject matter of Claims 14-16 above under 35 USC 103(a). **As to Claim 17**, Cheney teaches a device oriented to atomize the fluid towards the inner surface of the bubble and a central flow distributor (Figs. 3-6), a conduit which guides the fluid to the flow distributor (Figs. 3-5, Item 20), and the conduit comprising tubing (Fig. 6, Item 20) and a channel in the die mandrel (Fig. 6, Item 20). However, Applicant's admitted prior art and Cheney appear to be silent to nozzles. However, nozzles are conventional and are taught by Waldrum (Fig. 2). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the apparatus of Waldrum into that of Admitted prior art in order to desirably vary the spray pattern that is obtained (Waldrum, 3:25-35 and Fig. 3) to produce more efficient and accurate cooling.

6. **Claim 17** is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Cheney (USPN 3170011) and Pelzer (USPN 5422063). Applicant's admitted prior art and Cheney teach the subject matter of Claims 14-16 above under 35 USC 103(a). **As to Claim 17**, Cheney teaches a device oriented to atomize the fluid towards the inner surface of the bubble and a central flow distributor (Figs. 3-6), a conduit which guides the fluid to the flow distributor (Figs. 3-5, Item 20), and the conduit comprising tubing (Fig. 6, Item 20)

and a channel in the die mandrel (Fig. 6, Item 20). However, Applicant's admitted prior art and Cheney appear to be silent to nozzles. However, nozzles are conventional and are taught by Pelzer (3:45-50). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the apparatus of Pelzer into that of Admitted prior art in order to desirably provide a double cooling effect by droplets and mist (3:45-64).

7. **Claim 22** is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheney (USPN 3170011) in view of Waldrum (USPN 2917241). Cheney teaches the subject matter of Claim 18 above under 35 USC 102(b), or in the alternative, under 35 USC 103(a). **As to Claim 22**, Cheney teaches an apparatus capable of atomizing comprising:

- a) a plurality of ports oriented and capable of atomizing the fluid towards the inner surface of the bubble (Fig. 3);
- b) a central flow distributor to which the ports are connected (Fig. 5);
- c) a conduit, which guides the fluid to the flow distributor, the conduit comprising at least tubing and a channel in the die mandrel of the blown film extruder (Figs. 3-6, Item 20).

Cheney appears to be silent to nozzles. However, nozzles are conventional and are taught by Waldrum (Fig. 2). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the apparatus of Waldrum into that of Cheney in order to desirably vary the spray pattern that is obtained (Waldrum, 3:25-35 and Fig. 3) to produce more efficient and accurate cooling.

8. **Claim 22** is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheney (USPN 3170011) in view of Pelzer (USPN 5422063). Cheney teaches the subject matter of Claim 18 above under 35 USC 102(b), or in the alternative, under 35 USC 103(a). **As to Claim 22**, Cheney teaches an apparatus capable of atomizing comprising:

- a) a plurality of ports oriented and capable of atomizing the fluid towards the inner surface of the bubble (Fig. 3);
- b) a central flow distributor to which the ports are connected (Fig. 5);
- c) a conduit, which guides the fluid to the flow distributor, the conduit comprising at least tubing and a channel in the die mandrel of the blown film extruder (Figs. 3-6, Item 20).

Cheney appears to be silent to nozzles. However, nozzles are conventional and are taught by Pelzer (3:45-50). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the apparatus of Pelzer into that of Cheney in order to desirably provide a double cooling effect by droplets and mist (3:45-64).

Conclusion

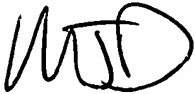
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Daniels whose telephone number is (571) 272-2450. The examiner can normally be reached on Monday - Friday, 7:30 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1732

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJD 4/25/06



MICHAEL P. COLAIANNI
SUPERVISORY PATENT EXAMINER